

allowing the enzyme sources, the nucleotide precursor and the sugar to be present in an aqueous medium to form and accumulate GDP-sugar or UDP-sugar in the aqueous medium; and

recovering GDP-sugar or UDP-sugar from the aqueous medium.


REMARKS

Claim 1 has been amended solely in order to correct a few inadvertent typographical errors.

Entry hereof is earnestly solicited.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted.


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VERSION WITH MARKINGS TO SHOW CHANGES MADE TO CLAIMS

1. (Three Times Amended) A process for producing a sugar nucleotide, which comprises:

selecting, as enzyme sources, a) a culture broth of a microorganism capable of producing [q]guanosine-5'-triphosphate ("GTP") or uridine-5-triphosphate ("UTP") from a nucleotide precursor, or a treated product of the culture broth selected from the group consisting of a concentrated product of the culture broth, a dried product of the culture broth, a culture supernatant obtained by centrifuging the culture broth, a concentrated product of the culture supernatant, an enzyme preparation obtained from culture supernatant, cells obtained by centrifuging the culture broth, a dried product of the cells, a freeze-dried product of the cells, a surfactant-treated product of the cells, a solvent-treated product of the cells, a protein fraction of the cells, an immobilized product of the cells and an enzyme preparation obtained by extraction from the cells, and b) a culture broth or culture broths of at least one strain of microorganism having genes responsible for production of [q]guanosine diphospho-sugar ("GDP-sugar") or uridine diphospho-sugar ("UDP-sugar") from a sugar selected from the group consisting of glucose, fructose, galactose, glucosamine, N-acetylglucosamine, N-acetylgalactosamine, mannose, fucose and N-acetylmannosamine, or a treated product of the culture broth selected from the group consisting of a concentrated product of the culture broth, a dried product of the culture broth, a culture supernatant obtained by centrifuging the culture broth, a concentrated product of the culture supernatant, an enzyme preparation obtained from

culture supernatant, cells obtained by centrifuging the culture broth, a dried product of the cells, a freeze-dried product of the cells, a surfactant-treated product of the cells, a solvent-treated product of the cells, a protein fraction of the cells, an immobilized product of the cells and an enzyme preparation obtained by extraction from the cells:

allowing the enzyme sources, the nucleotide precursor and the sugar to be present in an aqueous medium to form and accumulate GDP-sugar or UDP-sugar in the aqueous medium; and

recovering GDP-sugar or UDP-sugar from the aqueous medium.

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